



SAVANNAH RIVER SITE

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February 26, 2006

ESH-EMS-2007-00035

Ms. Amy M. Bennett
Standards Coordinator
Bureau of Water
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, SC 29201

Dear Ms. Bennett:

THE NOTICE OF DRAFTING FOR THE TRIENNIAL REVIEW OF SOUTH CAROLINA REGULATION 61-68, WATER CLASSIFICATION AND STANDARDS COMMENTS

In response to the Notice of Drafting published in the January 26, 2007 State Register concerning the triennial review of South Carolina Regulation 61-68, Water Classifications and Standards, Washington Savannah River Company (WSRC) would like to comment on the issues in the notice and propose several additional issues for consideration by South Carolina Department of Health and Environmental Control (SCDHEC). In past triennial reviews WSRC has commented on several of these issues and believe they have merit and should to be considered in the propose revision to the regulation.

Please consider the following comments:

REVIEW OF REVISED FEDERAL WATER QUALITY CRITERIA

In light of the recent questions raised about the appropriateness of the arsenic standard and the need to revisit the standard after its adoption into the South Carolina regulation, WSRC strongly recommends that the scientific bases for the 15 proposed criteria be reviewed before they are adopted at face value. SCDHEC needs to make their evaluations of the scientific bases available for comment by the regulated community before the proposed criteria are adopted.

DEFINITION OF EPHEMERAL STREAM

WSRC requests that the definition of ephemeral stream be refined to enable better identification of ephemeral streams through the use of biological indicators. SCDHEC should use scientifically defensible biological data for the development of the indicators.

WESTINGHOUSE SAVANNAH RIVER COMPANY

The WSRC Team: Westinghouse Savannah River Company LLC • Bechtel Savannah River, Inc. • BNFL Savannah River Corporation
BWXT Savannah River Company • CH2 Savannah River Company • Polestar Savannah River Company

DESIGNATED USES AND WATER QUALITY STANDARDS FOR EPHEMERAL STREAMS

The water quality standards that currently exist were not derived with ephemeral streams in mind and should not be applied to them. In their 2002, "Draft Strategy for Water Quality Standards and Criteria" EPA stated they would provide "guidance on adopting and implementing water quality standards for intermittent, ephemeral and effluent dependent waters" in 2004. More recently, EPA stated that they intend to provide written guidance after they complete a series of public meetings (Open Public Meeting on Designated Uses and Use Attainability Analysis, Atlanta, September 2005). To date they have not put forth that promised guidance. Although EPA has not completed their guidance, WSRC requests that SCDHEC develop scientifically-based designated uses and water quality standards for ephemeral streams and include them within R.61-68. Until these uses and criteria are included in the regulation, WSRC requests that language be added to the regulation or that a policy be implemented to require that individual permits issued by SCDHEC for discharges into ephemeral streams shall include only monitor and report requirements for all but conventional pollutants.

IRON AND MANGANESE STANDARDS

The standards for iron and manganese should be removed from R.61-68. Both constituents are naturally occurring – often at concentrations above the standards. For example, the average concentration of iron in the Savannah River is almost always above the water and organism consumption value of 300 parts per billion. Swamps and wetlands contain high concentrations of these metals and release them to surface waters routinely. If SCDHEC continues to regulate these two parameters at the levels listed in R.61-68, then permit writers will eventually begin placing permit limits on them in NPDES permits. This will result in considerable expenditures by Permittees in order to remove them from effluents – even if they are present due to natural conditions.

NITRATES STANDARD

SCDHEC should remove the nitrate human health value of 10 mg/l from the water and organism consumption column of the standards and return it to the MCL column. Many municipalities utilize extended aeration activated sludge treatment plants. These plants convert influent nitrogen compounds to nitrate as a normal part of the treatment process. Applying the nitrate value as anything other than an MCL may result in many facilities (such as publicly owned treatment works) incurring large expenditures to install denitrification systems. If SCDHEC intends to apply the fish and organism column only to facilities whose effluents are immediately above drinking water intakes, then this fact should be clarified within R.61-68, possibly by way of a footnote at the end of the Non Priority Pollutant table.

SITE SPECIFIC WATER QUALITY STANDARDS CONSIDERATIONS

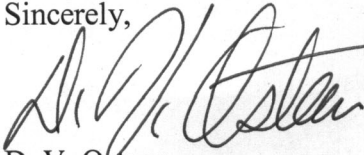
R. 61-68 sections C.5, C.12, and G.2 seem to indicate that site specific water quality standards derived for perennial streams cannot be applied to the ephemeral and intermittent streams that may be tributary to them. This is illogical since it is currently impossible, using EPA and SCDHEC guidelines, to develop site specific standards for ephemeral and intermittent streams. WSRC requests that language be changed/added such that site specific water quality standards that are developed for perennial streams automatically be applied to all ephemeral and intermittent streams that are tributary to them until such time as SCDHEC develops water quality standards for ephemeral and intermittent streams.

COPPER CRITERIA

SCDHEC should consider the information available for updating copper criteria. EPA has recently issued a notice of availability (February 22, 2007 Federal Register) concerning the use of the Biotic Ligand Model (BLM) for determining the copper criteria as opposed to the hardness-dependent criteria. The BLM should be a more realistic model because it takes into consideration of more water quality variables than the hardness-based criteria.

Your consideration of these issues in your review of R.61-68 will be greatly appreciated. If you have any questions or require additional information, please contact me at (803) 952-8318.

Sincerely,



D. V. Osteen
Environmental Services Section
Washington Savannah River Company LLC

DVO/

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A. M. Bennett
ESH-EMS-2007-00035
Page 4
February 26, 2007

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